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U.S. Nuclear Cooperation With India: Issues for Congress

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U.S. Nuclear Cooperation With India: Issues for Congress

Summary

On July 18, 2005, President Bush announced he would "work to achieve full civil nuclear energy cooperation with India" and would "also seek agreement from Congress to adjust U.S. laws and policies," in the context of a broader, global partnership with India to promote stability, democracy, prosperity and peace. Administration officials have promoted nuclear cooperation with India as a way to reduce India's carbon dioxide emissions and its dependence on oil, bring India into the "nonproliferation mainstream" and create jobs for U.S. industry.

India, which has never signed the Nuclear Nonproliferation Treaty (NPT), has nuclear weapons and does not have International Atomic Energy Agency safeguards on all nuclear material in peaceful nuclear activities. Its explosion of a "peaceful" nuclear device in 1974 convinced the world of the need for greater restrictions on nuclear trade. The United States created the Nuclear Suppliers Group as a direct response to India's test, halted nuclear exports to India a few years later, and worked to convince other states to do the same. India tested nuclear weapons again in 1998.

Nonproliferation experts have suggested that potential costs to U.S. and global nonproliferation policy of nuclear cooperation with India may far exceed the benefits. At a time when the United States has called for all states to strengthen their domestic export control laws and for tighter multilateral controls, U.S. nuclear cooperation with India would require loosening its own nuclear export legislation, as well as creating a Nuclear Suppliers Group exception. It would reverse nearly three decades of U.S. nonproliferation policy and practice towards India. Some believe this agreement undercuts the basic bargain of the NPT, could undermine hard-won restrictions on nuclear supply, and could prompt some suppliers, like China, to justify supplying other states outside the NPT regime, like Pakistan. Others believe that allowing India access to the international uranium market will free up domestic uranium sources to make more nuclear weapons.

Nuclear cooperation is governed by the Atomic Energy Act (AEA), which would require certain waivers and determinations from the President before nuclear cooperation with a state such as India could proceed. The Administration proposed legislation to Congress (H.R. 4974 and S. 2429, introduced by request) that would provide waivers of relevant provisions of the AEA (Sections 123 a. (2), 128, and 129) in advance of completion of a peaceful nuclear cooperation agreement. In addition, the legislation would alter the approval process of the agreement as though it conformed to the law's requirements, so that it could enter into force unless Congress acts to disapprove the agreement in 60 days of continuous session. On June 26, 2006, Representative Hyde introduced H.R. 5682, amending H.R. 4974 in the nature of a substitute. Meanwhile, Administration efforts to negotiate the text of a cooperation agreement (so-called "123 agreement") with India proceed, as do consultations with the Nuclear Suppliers Group. The outcome of those two negotiations will be extremely important to Congressional consideration of any such agreement. This report will be updated as necessary.

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U.S. Nuclear Cooperation With India: Issues for Congress

Recent Developments

On March 16, 2006, Senator Lugar introduced S. 2429 in the Senate, and Representatives Hyde and Lantos introduced H.R. 4974 in the House by request of the Bush Administration (see discussion below in "Proposed Legislation"). Both bills were entitled "To authorize the President to waive the application of certain requirements under the Atomic Energy Act of 1954 with respect to India." Secretary of State Rice appeared before the House International Relations Committee and Senate Foreign Relations Committee to discuss the India nuclear initiative and proposed legislation on April 5, 2006. On June 26, 2006, Representative Hyde introduced H.R. 5682 in the nature of a substitute and the Committee met on June 27 to mark up the bill. Meanwhile, U.S. officials offered draft decision language to Nuclear Suppliers Group (NSG) members in March on a broad exception for India, but members did not agree to take up a decision at the May 2006 plenary.

Background

The United States actively promoted nuclear energy cooperation with India from the mid-1950s, building nuclear power reactors (Tarapur), providing heavy water for the CIRUS research reactor, and allowing Indian scientists to study at U.S. nuclear laboratories. Although India was active in negotiations of the 1968 Nuclear Nonproliferation Treaty (NPT), India refused to join the NPT on grounds that it was discriminatory. The "peaceful" nuclear test in 1974 demonstrated that nuclear technology transferred for peaceful purposes could be used to produce nuclear weapons. In the United States, the Congress responded by passing the Nuclear Non-Proliferation Act of 1978 (NNPA, P.L. 95-242), which imposed tough new requirements for U.S. nuclear exports to non-nuclear-weapon states — full-scope safeguards and termination of exports if such a state detonates a nuclear explosive device or engages in activities related to acquiring or manufacturing nuclear weapons, among other things. Internationally, the United States created the Nuclear

¹ For an excellent analysis of the proliferation implications of U.S. nuclear exports to India, see Gary Milhollin, "Stopping the Indian Bomb," *The American Journal of International Law*, July 1987, 81 A.J.I.L. 593. See [http://www.wisconsinproject.org/pubs/articles/1987/stoppingindianbomb.htm].

² The NNPA, in part, amended the Atomic Energy Act of 1954. See 42 U.S.C. 2151 et seq. (continued...)

Suppliers Group (NSG) in 1975 to implement nuclear export controls. The NSG published guidelines in 1978 "to apply to nuclear transfers for peaceful purposes to help ensure that such transfers would not be diverted to unsafeguarded nuclear fuel cycle or nuclear explosive activities."³

Conditioning U.S. nuclear exports on non-nuclear-weapon states having fullscope safeguards created a problem particularly for India's safeguarded Tarapur reactors. When the NNPA was enacted, the United States was supplying lowenriched uranium (LEU) fuel. The Carter Administration exported two more shipments under executive order after the Nuclear Regulatory Commission (NRC) refused to approve an export license on nonproliferation conditions. Although the House voted to disapprove the President's determination, the Senate voted 46 to 48 on a resolution of disapproval. After 1980, all nuclear exports from the United States were cut off under the terms of the NNPA. France supplied fuel under the terms of the U.S. agreement with India until France also adopted a full-scope safeguards requirement (1984 to 1995). After the NSG adopted the full-scope safeguards condition in 1992, China picked up the slack, and Russia supplied fuel from 2001 to 2004.⁴ The issue of LEU fuel for Tarapur became one of pride for the Indians, particularly since their other reactors use natural uranium and they reportedly do not have the enrichment capability to supply Tarapur with fuel. Although the NPT requires safeguards on items going to non-nuclear weapon states, it does not explicitly prohibit nuclear commerce with states outside the NPT. In 1995, at the NPT Extension Conference, states supported the principle that non-NPT parties should not be eligible for the same kinds of assistance as NPT parties in good standing.

Prior to the 1970 NPT, safeguards (inspections, material protection, control and accounting) were applied to specific facilities or materials (known as INFCIRC/66-type agreements). The NPT required safeguards on all nuclear material in all peaceful nuclear activities for non-nuclear-weapon-state parties (those states not having detonated a nuclear explosive device prior to Jan. 1, 1967).

² (...continued)

³ IAEA Document INFCIRC/254, *Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software, and Related Technology*. Part 1 covers "trigger list" items: those especially designed or prepared for nuclear use: (i) nuclear material; (ii) nuclear reactors and equipment; (iii) non-nuclear material for reactors; (iv) plant and equipment for reprocessing, enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) associated technology. Part 2 covers dual-use items. Additional NSG criteria for dual-use exports include NPT membership and/or full-scope safeguards agreement; appropriate end-use; whether the technology would be used in a reprocessing or enrichment facility; the state's support for nonproliferation; and the risk of potential nuclear terrorism.

⁴ China was not a member of the NSG until 2004. Russia, an NSG member, exported fuel, citing a safety exception, but NSG members objected so strongly that Russia suspended supply in 2004. Russia agreed to resupply Tarapur in late February and informed the NSG on February 27, 2006, reportedly citing the NSG safety exception.

Global Partnership⁵

The Bush Administration had been considering a strategic partnership with India as early as 2001. Indian officials identified their growing energy needs as an area for cooperation, particularly in nuclear energy. The U.S.-India 2004 Next Steps in Strategic Partnership (NSSP) initiative included expanded cooperation in civil nuclear technology as one of three goals. Phase I of the NSSP, completed in September 2004, required addressing proliferation concerns and ensuring compliance with U.S. export controls.⁶

On July 18, 2005, President Bush announced the creation of a global partnership with India in a joint statement with Prime Minister Manmohan Singh. Noting the "significance of civilian nuclear energy for meeting growing global energy demands in a cleaner and more efficient manner," President Bush said he would "work to achieve full civil nuclear energy cooperation with India" and would "also seek agreement from Congress to adjust U.S. laws and policies."

The Joint Statement noted that the United States "will work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India, including but not limited to expeditious consideration of fuel supplies for safeguarded nuclear reactors at Tarapur." The United States committed to encouraging its partners to consider this request — a reversal in the U.S. position, which has been to ban fuel to Tarapur — and to consulting with its partners on Indian participation in ITER (collaboration on fusion research) and in the Generation IV International Forum for future reactor design.

Prime Minister Singh conveyed that India "would take on the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States." India agreed to:

- identify and separate its civilian and military nuclear facilities and programs;
- declare its civilian facilities to the International Atomic Energy Agency (IAEA);
- voluntarily place civilian facilities under IAEA safeguards;
- sign an Additional Protocol for civilian facilities;
- continue its unilateral nuclear test moratorium:

⁵ See also CRS Report RL33072, *U.S. - India Bilateral Agreements in 2005*, by K. Alan Kronstadt.

⁶ See fact sheet on the NSSP at [http://www.state.gov/r/pa/prs/ps/2004/36290.htm].

⁷ Joint Statement Between President George W. Bush and Prime Minister Manmohan Singh, White House Press Release, July 18, 2005, Washington, D.C. (hereafter cited as "July 18 Joint Statement") available at

[[]http://www.whitehouse.gov/news/releases/2005/07/20050718-6.html].

⁸ July 18 Joint Statement.

- work with the United States to conclude a Fissile Material Cut Off Treaty (FMCT);
- refrain from transferring enrichment and reprocessing technologies to states that do not have them, as well as support international efforts to limit their spread;
- secure its nuclear materials and technology through comprehensive export control legislation and through harmonization and adherence to Missile Technology Control Regime (MTCR) and NSG guidelines.

Issues for Consideration

The Atomic Energy Act of 1954, as amended, requires Congressional approval and oversight of peaceful nuclear cooperation agreements (details described below). As Senator Lugar has noted, "Ultimately the entire Congress ... must determine what effect the Joint Statement will have on U.S. efforts to halt the proliferation of weapons of mass destruction." Congress held four hearings each in 2005 and in 2006 on the global partnership and has consulted with the Administration on various aspects of the U.S.-India nuclear agreement. The discussion of potential issues for consideration is drawn in part from the hearings and from the emerging debate.

Strategy vs. Tactics

The Bush Administration has described its "desire to transform relations with India" as "founded upon a strategic vision that transcends even today's most pressing security concerns." There is clearly broad support for cultivating a close relationship with India, yet some members of Congress have suggested that civil nuclear cooperation may not be the most appropriate vehicle for advancing our relationship. In a House International Relations Committee hearing on September 8, 2005, Congressman Jim Leach stated,

⁹ Opening Statement, Chairman Richard G. Lugar, Senate Foreign Relations Committee hearing on "Implications of U.S.-India Nuclear Energy Cooperation," November 2, 2005 (hereafter referred to as November 2, 2005 SFRC India hearing).

¹⁰ The House International Relations Committee held the following hearings: "The U.S. and India: An Emerging Entente?" (September 8, 2005); "The U.S.-India Global Partnership: The Impact on Nonproliferation" (October 26, 2005); and "U.S.-India Global Partnership: How Significant for American Interests?" (November 16, 2005); "The U.S.-India Global Partnership" (April 5, 2006); "U.S.-India Global Partnership: Legislative Options" (May 11, 2006) See [http://wwwc.house.gov/international_relations] for testimonies of witnesses. The Senate Foreign Relations Committee held the following hearings: "Implications of U.S.-India Nuclear Energy Cooperation" (November 2, 2005); "U.S.-India Atomic Energy Cooperation: The Indian Separation Plan and the Administration's Legislative Proposal" (April 5, 2006); and "U.S.-India Atomic Energy Cooperation: Strategic and Nonproliferation Implications" (April 26, 2006). See [http://foreign.senate.gov/hearing.html] for testimonies.

¹¹ Statement of Under Secretary of State for Political Affairs, R. Nicholas Burns, September 8, 2005, House Committee on International Relations, Hearing on "The U.S. and India: An Emerging Entente?" (hereafter cited as "Sept. 8, 2005 HIRC US-India hearing") p. 1.

I don't know any member of Congress that doesn't want to have a warming of relations with the government of India.... I also don't know many members of Congress who are pushing for the precise commitment that the administration has made.¹²

Congressman Leach suggested instead that U.S. support for a permanent seat for India on the United Nations Security Council might have been a more appropriate gesture.

Other observers outside of Congress have questioned whether U.S. energy assistance should focus on expanding nuclear power, in contrast to other energy alternatives. Henry Sokolski, of the Nonproliferation Policy Education Center, has argued that Indian energy needs might be better met through free market allocation, including improved efficiency. He asserts that nuclear power is the least leveraged of India's options to meet India's energy needs, given that it currently provides only 2.7% of installed electrical capacity. If India's projections of its nuclear energy needs are predicated on an estimated annual growth rate of 8%, which some observers believe may be unrealistic. One well-known Indian commentator, Brahma Chellaney, argued in the *International Herald Tribune* that the premise that India should meet its rapidly expanding energy needs through importing nuclear power reactors was flawed. Chellaney argued that a better approach for India would be to secure clean-coal and renewable energy technologies. In the India should meet its rapidly expanding energy technologies.

The Senate Foreign Relations Committee's November 2, 2005 hearing sought, among other things, to answer the question of why civil nuclear cooperation was so important to the U.S.-Indian strategic relationship. Under Secretary of State Nicholas Burns told Committee members that "India had made this the central issue in the new partnership developing between our countries." ¹⁶

Impact on U.S. Nonproliferation Policies

The Administration has characterized civil nuclear cooperation with India as a "win" for nonproliferation because it would bring India into the "nonproliferation mainstream." In short, the Administration is proposing that India should be courted as an *ally* in U.S. (not global) nonproliferation policy, rather than continue as a *target* of U.S. (and global) nonproliferation policy. India should become an ally for three

¹² Remarks by Congressman Jim Leach, Sept. 8, 2005, HIRC US-India Hearing.

¹³ Henry Sokolski, "Implementing the Indian Nuclear Deal: What's at Risk, What Congress Should Require," Briefing to Congress, Sept. 2005.

¹⁴ See "India's Growth Target Unrealistic," *Financial Times*, Jan. 23, 2003, which quotes the Asia Development Bank.

¹⁵ Brahma Chellaney, "US Deal is a Bad Choice for Power Generation," *International Herald Tribune*, December 27, 2005.

¹⁶ Statement of Under Secretary of State for Political Affairs, R. Nicholas Burns, November 2, 2005, Senate Foreign Relations Committee Hearing on "Implications of U.S.-India Nuclear Energy Cooperation.

reasons: past policies have not worked; India has a relatively good nonproliferation record anyway, and India could be a useful ally in the nonproliferation regime.

Some observers, however, are concerned that India may not support U.S. nonproliferation policies sufficiently to warrant nuclear cooperation, particularly where the United States faces its greatest nuclear proliferation threat: Iran. For example, at the September 8 HIRC hearing, several members of Congress questioned whether the United States had obtained assurances from India of its support on Iran before it issued the July 18 joint statement.

Iran. Two factors may present challenges to Indian support for U.S. policies toward Iran. First, India has a growing strategic relationship with Iran, not limited to its interest in a proposed \$7.4 billion, 2800-km-long gas pipeline between Iran, Pakistan, and India. Second, India has a strong tradition of foreign policy independence, as a long-time leader of the Non-Aligned Movement (NAM) states and as a vigorous opponent of the discriminatory nature of the Nuclear Nonproliferation Treaty. Tone witness before the House International Relations Committee hearing on November 16, 2005, suggested that opposition from the United States on the gas pipeline project is considered to be "interference with India's autonomy in foreign relations, as well as disregard for its security and energy needs." ¹⁸

On Iran's nuclear program, Indian officials have stated they do not support a nuclear weapons option for Iran. However, they did not agree with the United States on the need to report Iran's nuclear program to the U.N. Security Council, which the United States has proposed for two years, nor on the need to limit Iran's nuclear fuel cycle development. When the IAEA Board of Governors passed a resolution (GOV/2005/77) on September 24, 2005, finding Iran in noncompliance with its safeguards agreement, India voted with the United States, provoking significant domestic dissent. However, the resolution was weak by traditional standards of noncompliance resolutions: it did not pass by consensus (Venezuela voted against it and 12 countries abstained) and it did not refer the matter immediately to the Security Council. According to Indian Foreign Secretary Shyam Saran, India voted for the resolution and against the majority of NAM states which abstained, because it felt obligated after having pressured the EU-3 to omit reference to immediate referral to the U.N. Security Council. ¹⁹ Moreover, India explained its vote this way:

In our Explanation of Vote, we have clearly expressed our opposition to Iran being declared as noncompliant with its safeguards agreements. Nor do we agree that the current situation could constitute a threat to international peace and security. Nevertheless, the resolution does not refer the matter to the Security

¹⁷ See Miriam Rajkumar, "Indian Independence," Carnegie Analysis, Sept. 20, 2005, at [http://www.carnegieendowment.org/npp/publications/index.cfm?fa=view&id=17486].

¹⁸ Dr. Francine Frankel, Statement before the House International Relations Committee, November 16, 2005, "India's Potential Importance for Vital U.S. Geopolitical Objectives in Asia: A Hedge Against a Rising China?"

¹⁹ "Press Briefing by Foreign Secretary on the events in UN and IAEA," New Delhi, Sept. 26, 2005, available at [http://www.indianembassy.org/press_release/2005/Sept/29.htm].

Council and has agreed that outstanding issues be dealt with under the aegis of the IAEA itself. This is in line with our position and therefore, we have extended our support.²⁰

On February 4, 2006, following Iran's resumption of some uranium enrichment research and development, the IAEA Board of Governors met in an emergency session and voted to report Iran's noncompliance to the U.N. Security Council.²¹ India voted with the United States to report Iran, although this followed a controversial remark to the press the previous week by U.S. Ambassador to India, David Mulford, that India would have to support the United States on Iran in Vienna or the U.S. Congress would not support the peaceful nuclear cooperation agreement.²²

Iran may also test India's support for curtailing peaceful nuclear programs. India has always been an advocate of states' rights to develop the peaceful uses of nuclear energy and for thirty years has derided the NPT and nonproliferation policies as discriminatory. The official Iranian press agency reported Prime Minister Singh as telling President Ahmadinejad on September 22, 2005, that solutions to Iran's nuclear problem should be based on the principle that Iran as an NPT member should retain its lawful rights.²³ On September 26, 2005, Foreign Secretary Saran told the press that "With respect to Iran's right to peaceful uses of nuclear energy, that is something which we have ourselves no reservations about."²⁴

Restricting Enrichment and Reprocessing. One of India's commitments in the July 18 statement was to refrain from transferring enrichment and reprocessing technologies to states that do not already have those technologies and to support international efforts to limit their spread. To some observers, U.S. efforts to restrict development of certain aspects of the nuclear fuel cycle (enrichment and reprocessing) that are most useful in a nuclear weapons development program are seen as creating a new category of "have-nots" — those states that can have some peaceful nuclear technology but cannot be trusted with it all. In other words, states like Japan, Germany, and Brazil might be trusted with sensitive technologies, but states like Iran and North Korea cannot be trusted. Historically, India has supported states' inalienable right to all peaceful uses of nuclear energy. However, India is now supporting EU-3 negotiations with Iran, which have as their ultimate objective getting Iran to walk away from enrichment and reprocessing.

David Albright, president of the Institute for Science and International Security, published a document on March 10, 2006 that asserted that India had potentially

²⁰ Briefing by MEA Official Spokesperson on Draft Resolution on Iran in IAEA, New Delhi, Sept. 24, 2005, available at [http://www.indianembassy.org/press release/2005/Sept/16.htm].

²¹ See CRS Report RS21592, *Iran's Nuclear Program: Recent Developments*, by Sharon Squassoni.

²² "U.S.-India Nuclear Deal Could Die, Envoy Warns," Washington Post, January 26, 2006.

²³ "Ahmadinejad Thanks India for Positive Stands on Iran in IAEA," IRNA, Sept. 23, 2005.

²⁴ Sept. 26, 2005 press briefing, op. cit.

exported centrifuge enrichment-related technology by virtue of tendering public offers and providing blueprints for technology to interested parties.²⁵ It is not clear whether Indian procurement practices facilitate transfer of technology, but the U.S. nuclear cooperation agreement will have no impact on those procurement practices. One question that arises is how India will be treated with respect to the U.S. policy restricting the expansion of enrichment and reprocessing technology. Is India a technology holder or not? On the one hand, the State Department asserted in responses to questions for the record from Senator Lugar that the United States will not engage in reprocessing or enrichment technology cooperation with India.²⁶ On the other hand, some observers have suggested that other NSG members may be interested in such cooperation with India that may not place as stringent requirements on India regarding the non-transfer of such technologies to third parties, and the United States is unlikely to object to such transfers, barring an NSG decision to ban such transfers.

Other Priorities. In his February 11, 2004, speech, President Bush outlined several counterproliferation priorities, including expanding the Proliferation Security Initiative; strengthening laws and international controls against weapons of mass destruction (WMD) and missile proliferation (ultimately resulting in adoption of UNSCR 1540); expanding the G8 Global Partnership; and strengthening IAEA safeguards through universal adoption of the Additional Protocol. Ambassador Joseph has noted that India's adherence to NSG and MTCR guidelines would help ensure that WMD and missile-related technologies would not be transferred. Although India's adoption of the Additional Protocol would contribute to its universalization, there are few proliferation benefits to be realized from the adoption of such a protocol in a nuclear weapons state. Finally, although the United States reportedly has asked India to endorse PSI, that endorsement has not been forthcoming.

Impact on the Nonproliferation Regime

India has long stood outside the nonproliferation regime and this initiative raises questions about whether a partial solution can be beneficial or detrimental. Some considerations include cohesion within the Nuclear Suppliers' Group, effect on non-nuclear weapon member states of the NPT, and perspectives on whether the initiative missed opportunities to strengthen the nuclear nonproliferation regime.

NSG Cohesion. Cohesion within the Nuclear Suppliers Group (NSG) is critical to effective implementation of export controls. As noted earlier, the NSG has followed the U.S. lead on requiring full-scope safeguards as a condition of nuclear supply. During the September 8 hearing, House International Relations Committee Chairman Henry Hyde noted that "Many of us are strong supporters of the NSG and

²⁵ David Albright and Susan Basu, "India's Gas Centrifuge Program: Stopping Illicit Procurement and the Leakage of Technical Centrifuge Know-How," available at [http://www.isis-online.org/publications/southasia/indianprocurement.pdf]

²⁶ "Questions for the Record Submitted to Under Secretaries Nicholas Burns and Robert Joseph by Chairman Richard G. Lugar (#6), Senate Foreign Relations Committee, November 2, 2005."

would not want to see it weakened or destroyed." Chairman Hyde asked whether the administration could assure the Committee that

...no matter what else happens, that the administration will continue to abide by NSG guidelines, and if you are unable to gain consensus within the NSG for the amendments you need, you will not implement the new India policy in violation of NSG guidelines.

Ambassador Joseph assured the Committee that "we intend to take no action that would undercut the effectiveness of the NSG," and further, that the Administration did not intend to change the consensus procedure or even change the NSG full-scope safeguards condition of nuclear supply.²⁷

Dissent within the NSG could be counterproductive to achieving other objectives the United States is pursuing in nuclear nonproliferation, such as restricting the fuel cycle, disarming North Korea, and restraining Iran, all of which rely on the considerable support of friends and allies. Moreover, harmonizing export controls has played a key role in Bush counter- and non-proliferation policies in the last few years and is particularly important for interdiction efforts. U.S.-India cooperation could prompt other suppliers, like China, to justify supplying other non-nuclear-weapon states, like Pakistan. China, which joined the NSG in 2004, has shared some negative views on the nuclear cooperation agreement, but it is not clear what position it will take at the NSG.²⁸ Russia, which only halted fuel supplies to the Indian Tarapur reactors in December 2004 at the insistence of the NSG, has already stepped into the breach by resuming fuel supplies to Tarapur under the guise of the safety exception, reportedly to the dismay of many NSG members.²⁹

Effect on NPT Member States. India has complained for years that it has been excluded from regular nuclear commerce because of its status outside the NPT. Some observers believe this is a good thing and shows that the policy works. Others believe that a new paradigm is needed for India because it will not join the NPT as a non-nuclear weapon state. One observer argued in a 2005 law review journal that India could join the NPT as a non-nuclear weapon state and not give up its nuclear weapons, primarily because the NPT defines "nuclear weapon states" but does not define non-nuclear weapon states and because the treaty does not expressly prohibit non-nuclear weapon states from possessing nuclear weapons, just from acquiring, manufacturing, receiving transfers of or control of nuclear weapons and not to seek or receive any assistance in manufacturing nuclear weapons. From a practical perspective, India would have to stop producing fissile material for nuclear weapons

²⁷ Sept. 8, 2005 HIRC US-India hearing.

²⁸ See, for example, "Nuclear Nonproliferation System is Challenged," *People's Daily*, March 16, 2006.

²⁹ "Concern over Russian Plan to Sell Nuclear Reactor Fuel," *Financial Times*, March 15, 2006.

³⁰ David S. Jonas, "Variations on Non-nuclear: May the 'Final Four' Join the Nuclear Nonproliferation Treaty as Non-nuclear Weapon States While Retaining Their Nuclear Weapons?" *Michigan State Law Review*, Summer, 2005, p. 417 ff. Mr. Jonas is General Counsel of the National Nuclear Security Agency.

and place all nuclear material (except that which is in its nuclear weapons) under IAEA safeguards.

The NPT is basically a two-way bargain. Non-nuclear-weapon states under the NPT give up the option of developing nuclear weapons in exchange for the promise of peaceful nuclear cooperation. Nuclear weapon states under the NPT were not required immediately to disarm, but to commit to eventual disarmament. India, as a state outside the NPT, is bound by neither of these commitments. Some observers may see the offer of nuclear cooperation previously reserved for states under the NPT with full-scope safeguards not only as undermining the agreements made by nonnuclear weapon states, but also the commitments made by nuclear weapon states to eventually disarm. In this view, India's continued unilateral testing moratorium is insufficient, compared with signing the Comprehensive Test Ban Treaty and its support for FMCT negotiations is insufficient compared with capping its nuclear weapons fissile material production now, as four of the five nuclear weapon states formally have done. Some have suggested that the absence of an Indian cap on fissile material production for weapons may make it difficult for China to declare it has halted fissile material production for weapons. Others have suggested that, absent a cap on fissile material production, it would be difficult to ensure that peaceful nuclear cooperation was not indirectly assisting or encouraging India's nuclear weapons program.

The proliferation shocks of the 1990s, when the Iraqi and North Korean clandestine nuclear weapons programs surfaced, led to the strengthening of the NPT and export control regimes. At the 1995 NPT Review and Extension Conference, NPT parties affirmed the NSG's decision to require full-scope safeguards for nuclear exports, supporting the principle that non-NPT parties should not be eligible for the same kinds of assistance as NPT parties in good standing. At the 2000 conference, NPT parties again supported that principle. According to one U.S. participant in that conference, "Reinforcement of this guideline is important given some who have questioned whether this principle should be relaxed for India and Pakistan, which have not accepted full-scope IAEA safeguards. The answer from NPT parties is clearly no."³¹

In the past 10 years, virtually all states agreed to strengthen the nonproliferation regime, sacrificing some sovereignty by allowing additional, intrusive inspections under the Additional Protocol. In the wake of revelations in 2004 about Pakistani scientist A.Q. Khan's nuclear black market sales, non-nuclear weapon states under the NPT are also being asked to consider further restrictions on their sovereignty by voluntarily restricting their access to sensitive nuclear technologies like uranium enrichment and reprocessing. If some states view the U.S.-Indian nuclear cooperation agreement as a breach of faith in the basic bargain of the NPT, they might be less inclined to accept additional sacrifices, to the detriment of the nonproliferation regime.

³¹ Ambassador Norman Wulf, "Observations from the 2000 NPT Review Conference," *Arms Control Today*, Nov. 2000.

Missed Opportunities. Ambassador Joseph described the nuclear initiative as representing "a substantial net gain for nonproliferation. It is a win for our strategic relationship, a win for energy security, and a win for nonproliferation." Ambassador Joseph said he was "convinced that the nonproliferation regime will emerge stronger as a result."³²

However, some observers have suggested the United States asked for too little. For example, Fred McGoldrick, Harold Bengelsdorf and Lawrence Scheinman, argued in the October 2005 issue of *Arms Control Today* that

It is open to serious doubt whether the proposed Indian concessions were significant enough to justify the accommodations promised by the United States and whether the steps the United States and India agreed to take in the civil nuclear area will, on balance, be supportive of global nonproliferation efforts...If the Bush Administration is able to implement the joint declaration without significant modification, it will have given the Indians a great deal — acknowledgment as a de facto nuclear weapon state and access to the international nuclear energy market — in return for largely symbolic concessions in the nonproliferation area. ³³

Robert Einhorn, of the Center for Strategic and International Studies, told members of the House International Relations Committee on October 26, 2005, that several of the steps pledged by India are "simply reaffirmations of existing positions." The Indian embassy itself, not surprisingly, has downplayed the depth and breadth of its nonproliferation commitments, describing all but its safeguards commitments under the July 18 statement in the following way:

A number of existing policies were also reiterated by India, among them a unilateral moratorium on nuclear testing, working towards conclusion of a multilateral Fissile Material Cut-off Treaty, non-transfer of enrichment and reprocessing technologies, securing nuclear materials and technology through export control, and harmonisation with MTCR and NSG guidelines.³⁵

India has had a self-imposed nuclear test moratorium for years, although supporters of this agreement note that this agreement would bind India bilaterally to honoring that pledge. If the NSG used a similar criterion in approving exports, it could further strengthen that pledge. India has supported FMCT negotiations for years, despite continuing to produce fissile material for use in nuclear weapons. Since the pace of FMCT negotiations has been glacial, support for negotiations could allow India to continue producing fissile material indefinitely. Moreover, the draft

³² Sept. 8, 2005 HIRC US-India hearing.

³³ Fred McGoldrick, Harold Bengelsdorf, Lawrence Scheinman, "The U.S.-India Nuclear Deal: Taking Stock," *Arms Control Today*, Oct. 2005, pp. 6-12. See [http://www.armscontrol.org/act/2005_10/OCT-Cover.asp].

³⁴ Statement by Robert J. Einhorn, Center for Strategic and International Studies, "The U.S.-India Global Partnership: The Impact on Nonproliferation" Oct. 26, 2005.

³⁵ "Backgrounder on India-U.S. Civilian Nuclear Energy Cooperation," Indian Embassy, July 29, 2005. See [http://www.indianembassy.org/press_release/2005/July/32.htm].

treaty on FMCT tabled by the United States in Geneva on May 18, 2006, would not require India's accession for the treaty to enter into force, thus lessening the pressure on India to join. At least one supporter of the agreement has argued that India should not cap its nuclear weapons program, and that outcomes restraining the ability to build up its nuclear stockpile "threaten to place New Delhi at a disadvantage vis-a-vis Beijing, a situation that could not only undermine Indian security but also U.S. interests in Asia.³⁶

The most far-reaching of the commitments is to separate civilian and military facilities, declare civilian facilities, and place them under safeguards. Administration officials have pointed to this aspect of the agreement as a nonproliferation "plus." Yet, allowing India broad latitude in determining which of its facilities to put under international safeguards is a privilege accorded currently only to nuclear weapon states under the NPT. Although the United States "in no way recognizes India as an NPT nuclear weapons state," excluding military facilities from inspections is a tacit recognition of their legitimacy.

Ambassador Burns told reporters on July 19, 2005, that "this agreement can be verified and will be verified," and presumably that refers to verifying the U.S. obligation under Article I of the NPT "not in any way to assist, encourage, or induce any non-nuclear weapon state to manufacture or otherwise acquire nuclear weapons." From a broader nonproliferation perspective, however, there is little value in inspecting facilities in a nuclear weapons state. In particular, an Additional Protocol on top of largely symbolic safeguards adds few nonproliferation benefits. Nonetheless, Ambassador Joseph has noted that signing an Additional Protocol will require India to report its trigger list exports to the IAEA.

IAEA Director General Dr. ElBaradei said that he has "always advocated concrete and practical steps towards the universal application of IAEA safeguards." In remarks to the Carnegie Endowment's Nonproliferation Conference in November 2005, Dr. ElBaradei cited additional safety benefits of putting more Indian facilities under safeguards. However, it should be noted that the NSG already has an exception to its full-scope safeguards requirement for safety-related items.

The Administration has asserted that India has an "exceptional" record of nonproliferation and despite a few isolated sanctions, most of the evidence supports the view that India has exercised restraint in export controls.³⁸ As such, however,

³⁶ Ashley J. Tellis, *India As A New Global Power: An Action Agenda for the United States*, Carnegie Endowment for International Peace, 2005, p. 25.

³⁷ "IAEA Director General Reacts to U.S.-India Cooperation Agreement," See [http://www.iaea.org/NewsCenter/PressReleases/2005/prn200504.html]. Critics of the IAEA point out that it is an organization that measures its success in part by how much nuclear material and how many facilities are under inspection.

³⁸ On Sept. 29, 2004, the State Department published Public Notice 4845 in the Federal Register imposing sanctions pursuant to the Iran Nonproliferation Act of 2000. Two Indian scientists were named — Dr. Prasad and C. Surendar. The State Department has not revealed what technology or equipment was transferred, but both scientists have worked for (continued...)

India's promise to refrain from transferring enrichment and reprocessing technologies to states that do not have them, as well as its promise to adhere to NSG guidelines, may be little more than a formality.

Many observers have noted that there are no measures in this global partnership to restrain India's nuclear weapons program. Many have suggested that the United States should have asked India to halt fissile material production for weapons. Ambassador Bob Joseph stated that the United States remains "committed to achieving Indian curtailment of fissile material production, and we have strongly encouraged a move in this direction. We stand willing to explore options that might serve this objective, but we will not insist on it for purposes of this civil nuclear initiative."³⁹ Indian officials, on the other hand, have taken pains to point out that "There is no commitment at all to cease production of fissile material ahead of the conclusion of such a multilateral [FMCT] treaty."⁴⁰ Other observers have noted that although India committed to a test ban, it did not commit to signing the Comprehensive Test Ban Treaty. Still other observers have suggested that if India insists on being treated as a nuclear weapon state, it should undertake responsibilities similar to those of the other nuclear weapon states, for example, placing fissile material excess to defense needs under safeguards. Many believe that real limits on India's nuclear weapons program would constitute a "win" for nonproliferation.

The Way Ahead

In his November 2005 testimony before the Senate Foreign Relations Committee, Under Secretary of State Bob Joseph listed five challenges: meaningful separation, negotiating the appropriate safeguards arrangement, NSG support, avoiding the temptation to renegotiate the deal, and securing domestic legal reform. Congressional views on separation and safeguards, as well as NSG support, may be key to Congress's consideration of the overall nuclear cooperation agreement, as well as its consideration of the Administration's proposed legislation.

³⁸ (...continued)

the Nuclear Power Corporation of India, Ltd., a government-owned entity that runs India's nuclear power plants. The Indian embassy reported in December 2005 that sanctions on Dr. Surendar had been removed. See [http://www.indianembassy.org/press_release/5.asp]. In the December 30, 2005 Federal Register, Public Notice 5257 stated simply that sanctions on an Indian entity issued in Public Notice 4845 had been rescinded.

³⁹ Sept 8, 2005 HIRC US-India hearing.

⁴⁰ "Backgrounder on India-U.S. Nuclear Energy Cooperation," July 29, 2005.

⁴¹ Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 SFRC India hearing.

Separation Plan and Safeguards⁴²

After months of negotiations, U.S. and Indian officials agreed on India's separation plan in March 2006. President Bush told reporters that the plan was "a good faith gesture by the Indian government that I'll be able to take to the Congress." The key elements of India's separation plan, as outlined in the March 7, 2006 Implementation document presented to the Indian Parliament, are as follows:⁴⁴

- 8 indigenous Indian power reactors will be placed under an Indiaspecific safeguards agreement, bringing the total number of power reactors under safeguards to 14 of 22 (6 are already under safeguards)
- Future power reactors may also be placed under safeguards, if India declares them as civilian
- Some facilities in the Nuclear Fuel Complex (e.g., fuel fabrication) will be specified as civilian in 2008.
- 9 research facilities and 3 heavy water plants would be declared as civilian, but are "safeguards-irrelevant."

The following facilities and activities were not on the separation list:

- 8 indigenous Indian power reactors
- Fast Breeder test Reactor (FTBR) and Prototype Fast Breeder Reactors (PFBR) under construction
- Enrichment facilities
- Spent fuel reprocessing facilities (except for the existing safeguards on the Power Reactor Fuel Reprocessing (PREFRE) plant)
- Research reactors: CIRUS (which will be shut down in 2010), Dhruva, Advanced Heavy Water Reactor
- 3 heavy water plants
- Various military-related plants (e.g., prototype naval reactor).

India's Implementation document noted that facilities were excluded from the civilian list if they were located in a larger hub of strategic significance, even if they were not normally engaged in activities of strategic significance, calling into question whether the plan really will result in a "separation" of civilian and military facilities. Moreover, the plan stated that electricity grid connectivity is not relevant to the separation exercise and that grid connectivity would be necessary "irrespective of

⁴² See CRS Report RL33292, *India's Nuclear Separation Plan: Issues and Views*, by Sharon Squassoni, for details on the separation plan.

⁴³ White House, Office of the Press Secretary, "Remarks by President Bush and Prime Minister Manmohan Singh of India," Mughal Garden, Hyderabad House, New Delhi, India, March 2, 2006.

⁴⁴ "Implementation of the India-United States Joint Statement of July 18, 2005: India's Separation Plan," tabled in Parliament on March 7, 2006. Available at [http://indianembassy.org/newsite/press_release/2006/Mar/sepplan.pdf]

whether the reactor concerned is civilian or not civilian." This means that "military" reactors will continue to provide civilian electricity.

In addition, the statement in the Implementation document that the Indiaspecific safeguards agreement will provide "for safeguards to guard against withdrawal of safeguarded nuclear material from civilian use at any time as well as for providing for corrective measures that India may take to ensure uninterrupted operation of its civilian reactors in the event of disruption of foreign fuel supplies" raises questions about whether the Indian interpretation of safeguards in perpetuity mirrors the U.S. interpretation. Corrective measures are not defined, but could mean the use of unsafeguarded nuclear material in an indigenous reactor. In that case, there could be periods of time when such reactors, using unsafeguarded nuclear material, would not necessarily be inspected. Moreover, IAEA safeguards agreements for states outside the NPT (INFCIRC-66 type) do not require safeguards in perpetuity for reactors that a state voluntarily places under safeguards, although they can be written that way. 45 According to one IAEA official, since 1974, the duration of 66-type agreements has been tied to actual use of supplied material or items, rather than fixed periods of time, 46 which would support the concept of lifting safeguards on the reactors once they are no longer using safeguarded material.

One question that arises is whether the separation plan conflicts with the United States obligation under Article I of the NPT to ensure that it does not "in any way assist, encourage or induce any non-nuclear-weapon state to manufacture nuclear weapons." On the broadest level, several nonproliferation critics of the potential agreement have suggested that only a halt in India's production of fissile material for nuclear weapons would ensure that U.S. assistance does not aid India's nuclear programs, regardless of how many facilities India places under safeguards.⁴⁷ This is because India's current uranium shortage reportedly forces it to choose between civilian power generation and nuclear weapons production. Opening up the international market as a new source of uranium — forbidden to India since 1992 by the NSG — would free up India's domestic uranium for its nuclear weapons

⁴⁵ Paragraph 16 of INFCIRC/66 states "In the light of Article XII.A.5 of the Statute, it is desirable that safeguards agreements should provide for the continuation of safeguards, subject to the provisions of this document, with respect to produced special fissionable material and to any materials substituted therefor."

⁴⁶ Laura Rockwood, "Legal Instruments Related to the Application of the Safeguards," paper for conference, "Safeguards: Verifying Compliance with Nonproliferation Commitments," Kingston, Jamaica, April 25-26, 1996.

⁴⁷ Henry Sokolski, in "Fissile isn't Facile," *Wall Street Journal*, February 21, 2006, suggested that "If we want to keep this aid from freeing up India's domestic nuclear resources to make more bombs...we have to get serious about India capping its nuclear weapons program." David Albright made a more direct connection in his testimony before the House International Relations Committee hearing, "The U.S.-India Global Partnership: The Impact on Nonproliferation," on October 26, 2005 (hereafter HIRC Oct 26, 2005 hearing), stating that "Without India halting production of fissile material for its nuclear weapons programs, nuclear assistance, particularly any in the areas involving the fuel cycle, would likely spill over to India's nuclear weapons program."

program, and therefore, could be interpreted as assisting or encouraging the Indian nuclear weapons program.⁴⁸

Another question that arises is whether India, in the absence of full-scope safeguards, can provide sufficient confidence that U.S. peaceful nuclear technology will not be diverted to nuclear weapons purposes, as many believe it was in 1974. Some observers believe that IAEA safeguards provide little assurance of the non-diversion of fissile material, particularly in a state that has an active nuclear weapons program. Others believe that the implementation of an Additional Protocol helps strengthen the IAEA's capabilities to detect undeclared activities. India has agreed to sign an additional protocol for its civilian facilities. However, given India's unsafeguarded nuclear facilities, this step is also unlikely to make a difference in providing additional assurances of the non-diversion of nuclear material.

The application of "permanent" safeguards on the facilities declared to be civilian could make the separation more meaningful.⁵⁰ Early in the process, Indian officials had suggested they would adopt a strictly voluntary safeguards arrangement, such as those in force for nuclear weapon states wherein facilities can be put on and taken off of lists of eligible facilities. In his November 2, 2005 testimony before the Senate Foreign Relations Committee, Under Secretary Joseph stated that the United States "would not view a voluntary offer arrangement as defensible from a nonproliferation standpoint or consistent with the Joint Statement, and therefore do not believe it would constitute an acceptable safeguards arrangement." He also asserted that safeguards must be applied in perpetuity.⁵¹ This stems from a U.S. legal obligation under Section 123 a. (1) of the Atomic Energy Act to maintain safeguards with respect to all U.S. materials and equipment transferred pursuant to the agreement as long as that material or equipment remains under the jurisdiction of the cooperating party, irrespective of whether the agreement is terminated or suspended [emphasis added]. Although it is likely that safeguards will be applied in perpetuity to anything the United States transfers, it may not be as likely that safeguards will be applied in perpetuity to those indigenous reactors India places

⁴⁸ Zia Mian and M.V. Ramana, "Wrong Ends, Means, and Needs: Behind the U.S. Nuclear Deal with India, *Arms Control Today*, January/February 2006. See also Robert Einhorn, "Limiting the Damage," *The National Interest*, Winter 2005/2006.

⁴⁹ Although India maintained a certain ambiguity by calling its 1974 test a "peaceful nuclear explosion," the 1998 tests leave little doubt that the experience gained was put to use in a nuclear weapons program. Plutonium produced in the CIRUS reactor, which the United States supplied with heavy water, was used in the 1974 test. See Victor Gilinsky and Paul Leventhal, "India Cheated," *Washington Post*, June 15, 1998.

⁵⁰ There are three basic types of safeguards agreements: INFCIRC/66, INFCIRC/153, and voluntary safeguards agreements made by the five nuclear weapon states. INFCIRC, an abbreviation of "Information Circular," is a designation the IAEA uses to record its agreements with states and organizations. INFCIRC/66 and /153 are model agreements; the actual agreements with states will bear different numbers. INFCIRC/66 agreements predate the NPT and were used in bilateral safeguards arrangements, whereas INFCIRC/153 agreements are "full-scope safeguards" under the NPT.

⁵¹ Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 SFRC India hearing.

under safeguards, for the reasons described above. The safeguards agreement, yet to be negotiated between India and the IAEA, will specify whether that is the case.

Administration officials repeatedly have stressed that India's separation plan must be credible, transparent, and defensible from a nonproliferation standpoint, and that "the resultant safeguards must contribute to our nonproliferation goals." To those observers who interpreted that to mean that a separation plan would need to take into account India's past commitments (e.g., use of purportedly "peaceful" nuclear reactors like CIRUS to produce plutonium for nuclear weapons) and the impact on its nuclear weapons program (e.g., capping India's fissile material production), the separation plan may not appear credible. The draft legislation, H.R. 4974 and S. 2429, make the provision of a credible plan one of the seven actions that India must take before the President can waive the relevant provisions of the Atomic Energy Act.

To those observers who interpreted "credible" to mean that all power reactors that supplied electricity would be declared civilian because they have a civilian use, the separation plan may not appear credible. Secretary Rice has stressed, however, that more reactors under safeguards means more transparency, more physical security, better nuclear safety, and therefore increased safety for the United States. Answering a question for the record submitted by Senator Lugar on April 5, 2006 on whether exports of nuclear material or reactors from the United States would in any way assist India's nuclear weapons program or break U.S. obligations under the NPT, the Administration made two major points:

- Any items sent to India would be subject to safeguards, and implementation of the Additional Protocol would provide further assurances of the non-diversion of such items or material;⁵⁵
- The NPT does not consider peaceful nuclear cooperation under safeguards as assisting non-nuclear weapon states to manufacture nuclear weapons

Some observers have argued that types of facilities are also important in assessing whether the plan is defensible from a nonproliferation standpoint. For example, in terms of preventing terrorist access to fissile material, safeguarding facilities like reprocessing and enrichment plants and breeder reactors could be viewed as providing a significant nonproliferation benefit because the materials produced by these plants are a few steps closer to potential use in a bomb. In addition, safeguards on enrichment, reprocessing plants, and breeder reactors would support the 2002 U.S. National Strategy to Combat Weapons of Mass Destruction, in which the United States pledged to "continue to discourage the worldwide

⁵² Statement of Dr. Joseph, November 2, 2005 SFRC India hearing.

⁵³ Ibid.

⁵⁴ Condoleeza Rice, "Our Opportunity With India," Washington Post, March 13, 2006.

⁵⁵ The Additional Protocol is a measure to strengthen safeguards by providing for additional information, access and inspection tools. INFCIRC/540, concluded in 1997, is the model upon which states' protocols to their safeguards agreements are based.

accumulation of separated plutonium and to minimize the use of highly-enriched uranium."⁵⁶

NSG Support

U.S. officials have consulted both informally and formally with NSG members thus far.⁵⁷ Initial responses from the United Kingdom, Russia and France have all been positive. In September 2005, France issued a joint statement with India that it would work with NSG partners to enable nuclear cooperation with India to go forward, and Prime Ministers Chirac and Singh signed a nuclear cooperation declaration with India in February 2006.⁵⁸ Other responses have been mixed, especially from Sweden and Canada. Some "NPT purists," including Ireland, Japan, Sweden, Norway, and the Netherlands, reportedly have raised questions. Canada reportedly told U.S. officials that it welcomed U.S. steps to addressing what has been a thorny issue in the NPT — nuclear weapon states outside the regime — but had hoped the United States would have placed more conditions on the agreement. In particular, the deal would have been more positive if the United States had obtained an Indian commitment to freeze production of fissile material for nuclear weapons.⁵⁹

In October 2005, the NSG held a Consultative Group meeting, at which some members reportedly stressed the need for limits on cooperation, such as no enrichment or reprocessing cooperation, no heavy water cooperation, and no exports of highly enriched uranium or plutonium. In late March 2006, NSG members held another Consultative Group meeting, at which the United States presented a draft decision for potential discussion at the NSG plenary in May 2006. Member states did not agree to put the draft decision on the May agenda, but continued discussions. Administration officials reportedly are looking to the fall of 2006 for a possible decision.

The draft decision tabled by U.S. officials on March 23, 2006 reportedly sought an exception for India to the NSG requirements of full-scope safeguards, notwithstanding the exceptions for safety assistance and for those agreements signed before the full-scope safeguards requirement came into effect in 1992. It did not contain, reportedly, any restrictions on enrichment or reprocessing cooperation, nor on heavy water or HEU or plutonium sales.

⁵⁶ National Strategy to Combat Weapons of Mass Destruction, December 2002. Available at [http://www.whitehouse.gov/news/releases/2002/12/WMDStrategy.pdf]

⁵⁷ "NSG Begins Mulling Response To U.S.-India Cooperation Deal," *Nuclear Fuel*, Sept. 26, 2005.

⁵⁸ Sept. 12, 2005, Joint Statement by President Chirac and Prime Minister Singh, Paris. "India, France Sign Nuclear Cooperation Declaration," *Financial Express*, February 21, 2006.

⁵⁹ "NSG Begins Mulling Response To U.S.-India Cooperation Deal," *Nuclear Fuel*, Sept. 26, 2005.

⁶⁰ The text of the draft decision was circulated by Daryl Kimball of the Arms Control Association on March 21, 2006.

Consulting with Congress

On March 9, 2006, the Administration submitted its proposed legislation to Representative Hyde and Senator Lugar. On March 16, 2006, Representatives Hyde and Lantos introduced H.R. 4974, and Senator Lugar introduced S. 2429 (see discussion under "Proposed Legislation"). The House International Relations Committee and the Senate Foreign Relations Committee held public hearings on U.S. nuclear cooperation with India in April and May.

Under existing law (Atomic Energy Act of 1954; P.L. 95-242; 42 U.S.C. § 2153 et seq.) all significant nuclear cooperation requires an agreement for cooperation. The Nuclear Non-Proliferation Act of 1978 (NNPA) amended the Atomic Energy Act of 1954 to include, among other things, a requirement for full-scope safeguards for significant nuclear exports non-nuclear weapon states. 62

At issue are the requirements for full-scope nuclear safeguards contained in Section 123 a. (2) for approval of an agreement for cooperation and in Section 128 for licensing nuclear exports. India, a non-party to the Nuclear Nonproliferation Treaty (NPT), does not have full-scope safeguards, nor is it ever expected to adopt full-scope safeguards, since it has a nuclear weapons program that would preclude them. Also at issue is the requirement in Section 129 to stop exports if a non-nuclear weapon state has detonated a nuclear device after 1978, among other things. India detonated several nuclear devices in 1998.

These three sections of the AEA provide mechanisms for the President to waive those requirements and sanctions (in Section 129), which are spelled out in more detail below. The sections also provide legislative vetoes, in the form of concurrent resolutions, of the presidential determinations. In 1983, however, the Supreme Court decided in *INS v. Chadha* that legislative veto provisions that do not satisfy the bicameralism and presentment requirements of Article I of the Constitution were unconstitutional. In 1985, some parts of the AEA were amended to provide for joint resolutions of approval or disapproval (e.g., Section 123 d.). The *Chadha* decision affects how Congress would disapprove of such presidential determinations under existing law and therefore affects the impact of the Administration's proposed legislation.

Agreements for Cooperation. Section 123 of the AEA (42 U.S.C. 2153) specifies what must happen before nuclear cooperation can take place.

• Section 123 a. states that the proposed agreement shall include the terms, conditions, duration, nature, and scope of cooperation and lists nine criteria that the agreement must meet. It also contains provisions for the President to exempt an agreement from any of the

⁶¹ Nuclear cooperation includes the distribution of special nuclear material, source material, and byproduct material, to licensing for commercial, medical, and industrial purposes. These terms, "special nuclear material," "source material," and "byproduct material," as well as other terms used in the statute, are defined in 42 U.S.C. § 2014.

⁶² P.L. 83-703, 42 U.S.C. §§ 2153 et seq.

- nine criteria, and includes details on the kinds of information the executive branch must provide to Congress;
- Section 123 b. specifies the process for submitting the text of the agreement to Congress;
- Section 123 c. specifies how Congress approves cooperation agreements that are limited in scope (e.g., do not transfer nuclear material or cover reactors larger than 5 MWe.).⁶³
- Section 123 d. specifies how Congress approves agreements that do cover significant nuclear cooperation (transfer of nuclear material or reactors larger than 5 MWe), including exempted agreements.

The United States has 23 agreements for cooperation in place now, and had an agreement with India from 1963 to 1993. It should be noted that such agreements for cooperation are "framework" agreements – they do not guarantee that cooperation will take place or that nuclear material will be transferred, but rather set the terms of reference and provide authorization for cooperation. The 1963 U.S.-India cooperation agreement is anomalous in that it did guarantee fuel for the Tarapur reactors, even though other U.S. nuclear cooperation agreements reportedly have not included any such guarantees.⁶⁴

Section 123 a. lists nine criteria that an agreement must meet unless the President exempts the agreement. These are listed in Section 123 a., paragraphs (1) through (9), 42 U.S.C. 2153. These are guarantees that (1) safeguards on nuclear material and equipment transferred continue in perpetuity; (2) full-scope safeguards are applied in non-nuclear weapon states; (3) nothing transferred is used for any nuclear explosive device or for any other military purpose; (4) U.S. has right of return if the cooperating state detonates a nuclear explosive device or terminates or abrogates an International Atomic Energy Agency (IAEA) safeguards agreement; (5) there is no transfer of material or classified data without U.S. consent; (6) physical security is maintained; (7) no enrichment or reprocessing without prior approval; (8) storage is approved by United States for plutonium and highly enriched uranium; and (9) anything produced through cooperation is subject to all of the above requirements.

In the case of India, the most difficult of these requirements to meet is the full-scope safeguards requirement for non-nuclear weapon states (Sec. 123 a. (2)). India is considered to be a non-nuclear weapon state because it did not, as defined by the Nuclear Nonproliferation Treaty, explode a nuclear device before January 1, 1967.⁶⁵

⁶³ In the 1954 Act, the provisions in Section 123 c. covered all agreements for cooperation. Section 123 d. was added in 1958 (P.L. 85-479) to cover military-related agreements. In 1974, P.L. 93-485 amended Section 123 d. to include agreements that covered reactors producing more than 5 MW thermal or special nuclear material connected therewith.

⁶⁴ United States General Accounting Office, "Nuclear Agreement: Cooperation Between the United States and the People's Republic of China," GAO/NSIAD-86-21BR, November 1985, Appendix I-1.

⁶⁵ 42 U.S.C. 2153 a.(2). Section 4 (b) of the NNPA specifies that all other terms used in the NNPA not defined in Section 4 "shall have the meanings ascribed to them by the 1954 Act, (continued...)

The President may exempt an agreement for cooperation from any of the requirements in Section 123 a. if he determines that meeting the requirement would be "seriously prejudicial to the achievement of U.S. non-proliferation objectives or otherwise jeopardize the common defense and security." An exempted agreement would not become effective "unless the Congress adopts, and there is enacted, a joint resolution stating that the Congress does favor such agreement." In other words, both chambers of Congress must approve the agreement if it does not contain all of the Section 123 a. requirements.

If Congress votes to approve an agreement for cooperation that was exempted because the recipient state did not have full-scope safeguards (Section 123 a. (2)), such approval would essentially waive the Nuclear Regulatory Commission's (NRC) obligation to consider full-scope safeguards as an export license authorization criterion under Section 128. However, Congress would still have the authority to review one export license authorization approximately every 12 months after the agreement for cooperation has entered into force. (See discussion below)

Section 123 d., in part, states the following:

if Congress fails to disapprove a proposed agreement for cooperation which exempts the recipient nation from the requirement set forth in subsection 123 a. (2), such failure to act shall constitute a failure to adopt a resolution of disapproval pursuant to subsection 128 b. (3) for purposes of the Commission's consideration of applications and requests under section 126 a. (2) and there shall be no congressional review pursuant to section 128 of any subsequent license or authorization with respect to that state until the first such license or authorization which is issued after twelve months from the elapse of the sixty-day period in which the agreement for cooperation in question is reviewed by the Congress.⁶⁷

Export Licensing. In addition to specifying criteria for framework agreements, the AEA sets out procedures for licensing exports (Sections 126, 127, and 128 codified as amended at 42 U.S.C. 2155, 2156, 2157). The Nuclear Regulatory Commission (NRC) is required to meet criteria in Sections 127 and 128 in authorizing export licenses; Section 128 contains the requirement for full-scope

^{65 (...}continued)

the Energy Reorganization Act of 1974 and the Treaty [NPT]." S.Rept. 95-467 further clarified that under the NPT, the five nuclear weapon states are the U.S., U.K., China, the Soviet Union, and France. U.S. Code Congressional and Administration News, 95th Cong., 2nd sess., 1978, vol. 3, p. 329.

⁶⁶ This new requirement was added by the Export Administration Amendments Act of 1985, P.L. 99-64, Section 301 (b) (2), 99 Stat. 120.

⁶⁷ The language "fails to disapprove" is an artifact of the 1978 Nuclear Nonproliferation Act, which used legislative vetoes in the form of concurrent resolutions of disapproval. In 1985, following the Supreme Court's *Chadha* decision invalidating the use of legislative vetoes, the Export Administration Amendments Act created a separate approval process for exempted agreements, which this part of Section 123 d. is referring to, that called for a joint resolution of approval. Thus, "fails to disapprove" could be interpreted as "approves" in the form of a joint resolution of approval.

safeguards for non-nuclear weapon states. Section 126 b. (2) contains a provision for the President to authorize an export in the event that the NRC deems that the export would not meet Section 127 and 128 criteria. The President must determine "that failure to approve an export would be seriously prejudicial to the achievement of U.S. nonproliferation objectives or otherwise jeopardize the common defense and security." The President would submit his executive order, along with a detailed assessment and other documentation, to Congress for 60 days of continuous session. After 60 days of continuous session, the export would go through unless Congress passes a concurrent resolution of disapproval. 68

In the case of exports pursuant to an exempted agreement for cooperation (i.e., exempted from the full-scope safeguards requirement), as described above, the NRC would not have to meet the full-scope safeguards requirement in assessing whether it could issue export licenses (Section 128 b. (3)). Congress would review one license every 12 months. If Congress passed a resolution of disapproval, no further exports could be made during that Congress.⁶⁹

In both cases, Section 128 contains a provision for the President to waive termination of exports by notifying the Congress that the state has adopted full-scope safeguards or that the state has made significant progress toward full-scope safeguards, or that U.S. foreign policy interests dictate reconsideration. Such a determination would become effective unless Congress disagrees with the President's determination.⁷⁰

Termination of Cooperation. Section 129 of the AEA (42 U.S.C. 2158) requires ending exports of nuclear materials and equipment or sensitive nuclear technology to any non-nuclear-weapon state that, after March 10, 1978, the President determines to have:

- detonated a nuclear explosive device;
- terminated or abrogated IAEA safeguards;
- materially violated an IAEA safeguards agreement; or
- engaged in activities involving source or special nuclear material and having "direct significance" for the manufacture or acquisition of nuclear explosive devices, and "has failed to take steps which, in the President's judgment, represent sufficient progress toward terminating such activities."

In addition, Section 129 would also halt exports to any nation the President determines:

⁶⁸ In light of the *Chadha* decision, passing a concurrent resolution could invite a legal challenge. Although this is not provided for in the AEA, Congress could choose to pass a joint resolution of disapproval or a bill stating in substance it did not approve.

⁶⁹ Section 128 b. (3) refers to a "resolution of disapproval," and this would likely be a joint resolution of disapproval, in light of the *Chadha* decision.

⁷⁰ Section 128 b. (2) refers to a "concurrent resolution." In light of the *Chadha* decision, Congress could pass a joint resolution disagreeing with the President's determination, or pass a bill barring nuclear exports for a certain period of time to that country.

- to have materially violated the terms of an agreement for cooperation with the U.S.:
- assisted, encouraged, or induced any other non-nuclear weapon state to obtain nuclear explosives or the materials and technologies needed to manufacture them; or
- re-transferred or entered into an agreement for exporting reprocessing equipment, materials or technology to another non-nuclear weapons state.

The President can waive termination if he determines that "cessation of such exports would be seriously prejudicial to the achievement of United States nonproliferation objectives or otherwise jeopardize the common defense and security." The President must submit his determination to Congress, which is then referred to the House International Relations Committee and the Senate Foreign Relations Committee for 60 days of continuous session. The determination becomes effective unless Congress opposes it.⁷¹

The Process. The process of implementing an agreement under existing law would be, roughly, as follows:

- The President would determine that meeting the requirement for full-scope safeguards in an agreement for cooperation with India would be seriously prejudicial to the achievement of U.S. nonproliferation objectives or otherwise jeopardize that common defense and security.
- The President would submit the "exempted" or nonconforming agreement to Congress along with a Nuclear Proliferation Assessment Statement to the Senate Committee on Foreign Relations and the House Committee on International Relations and would consult for 30 days with the Committees regarding the consistency of the terms of the proposed agreement with all the requirements of the AEA.
- The exempted agreement would lie before Congress for 60 days of continuous session (once a Nuclear Proliferation Assessment Statement is received).⁷²
- An exempted agreement would become effective only if Congress enacts a joint resolution of approval.
- If the exempted agreement is approved, no congressional review of exports is required until 12 months after the first export has been licensed. Thereafter, an annual review is required per Section 128. In the event that Congress would pass a joint resolution of disapproval for an export authorization, the President could waive

⁷¹ Section 129 specifies that the President's determination "shall not become effective if during such sixty-day period the Congress adopts a concurrent resolution stating in substance that it does not favor the determination." Again, in light of *Chadha*, Congress could choose to enact a joint resolution stating it does not favor the determination, or enact a law expressly rejecting the determination.

⁷² Specific procedures are found in AEA, Sections 123 and 130.

- termination of exports, for example, by notifying the Congress that U.S. foreign policy interests dictate reconsideration. Exports could continue if Congress did not disagree with the determination.⁷³
- Prior to the first export, the President could waive a cutoff in exports pursuant to Section 129, by determining that "cessation of such exports would be seriously prejudicial to the achievement of United States nonproliferation objectives or otherwise jeopardize the common defense and security." If Congress passed a joint resolution of disapproval within 60 days of continuous session to halt exports again, and the President did not veto the resolution, exports would cease.⁷⁴

Proposed Legislation: H.R. 4974/S. 2429

On March 16, 2006, Representatives Hyde and Lantos introduced H.R. 4974, and Senator Lugar introduced S. 2429, both with the titles of a bill "To authorize the President to waive the application of certain requirements under the Atomic Energy Act of 1954 with respect to India." The bills were introduced upon request and without recommendation.

The proposed legislation seeks to provide an alternative to the President for waiving Sections 123 a. (2), 128, and 129 of the Atomic Energy Act. Under Sections 123 a. (2) and Section 129, a waiver under existing law would require a presidential finding that meeting the relevant requirements would be seriously prejudicial to achieving U.S. nonproliferation objectives or otherwise jeopardize the common defense and security. Under Section 128, the President would have to determine that U.S. foreign policy interests dictate reconsideration of a halt in exports, if Congress chose to halt exports as a result of its annual review.

The proposed legislation would require the President, instead, to make a determination that the following actions have occurred:

- 1. India has provided the United States and the IAEA with a credible plan to separate civil and military facilities, materials, and programs, and has filed a declaration regarding its civil facilities with the IAEA;
- 2. An agreement has entered into force between India and the IAEA requiring the application of safeguards in accordance with IAEA practices to India's civil nuclear facilities as declared in the plan described in paragraph (1) above;
- 3. India and the IAEA are making satisfactory progress toward implementing an Additional Protocol that would apply to India's civil nuclear program;
- 4. India is working with the United States for the conclusion of a multilateral Fissile Material Cutoff Treaty;
- 5. India is supporting international efforts to prevent the spread of enrichment and reprocessing technology

⁷³ Congress could disagree with the President's determination in the form of a joint resolution of disapproval.

⁷⁴ Section 129 calls for a concurrent resolution of disapproval, but as noted above, the legislative veto was ruled unconstitutional by the *Chadha* decision.

- 6. India is ensuring that the necessary steps are being taken to secure nuclear materials and technology through the application of comprehensive export control legislation and regulations, and through harmonization and adherence to Missile Technology Control Regime (MTCR) and Nuclear Suppliers Group (NSG) guidelines; and
- 7. Supply to India by the United States under an agreement for cooperation arranged pursuant to section 123 of the Atomic Energy Act is consistent with U.S. participation in the Nuclear Suppliers Group.

According to the proposed legislation, once the President makes a determination that all these actions have taken place, he can waive the full-scope safeguards requirement in Section 123 a. (2) of the AEA for an agreement for cooperation with India and submit the agreement through the routine approval process as if it were not exempted. Such an agreement would enter into force unless Congress passed a joint resolution of disapproval. The President would be able to waive the application of Section 128 and the application of sanctions under Section 129 with respect to India. In effect, waiving Section 128 would eliminate the annual Congressional review of exports to India. Waiving Section 129 would eliminate the requirement for an immediate Presidential waiver of the termination of exports, as outlined above.

The proposed legislation would allow for the application of Section 129 sanctions if India tested a nuclear device again:

(d) A determination under subsection (b) shall not be effective if the President determines that India has detonated a nuclear explosive device after the date of enactment of this Act.

However, the proposed legislation apparently would not require ending nuclear exports to India if India engaged in other activities specified in Section 129.

How Proposed Legislation Affects Congressional Approval. The proposed legislation presents three major changes from the existing law. First, it would change the approval process from that of an exempted agreement (one that did not meet all Section 123 a. requirements, or non-conforming) to that of a routine, or conforming agreement. This would mean that the U.S.-India nuclear cooperation agreement would automatically enter into force after sitting before Congress for 90 days (30 days of consultation with the relevant committees and 60 days after an NPAS is submitted). It would take a joint resolution of disapproval by Congress, within 90 days, to oppose the agreement. However, a joint resolution of disapproval would have to be signed by the president and therefore risks a veto, essentially requiring a veto-proof two-thirds majority vote to ensure that the agreement would not enter into force.

In practice, a routine approval process for this agreement would mean less time for members to review the agreement and a higher threshold to meet in the event that Congress opposed the agreement. The time limit (90 days of continuous session) on Congressional consideration under a routine approval process could make it more difficult for Congress to thoroughly review the agreement. This could be an important consideration, particularly in the case of India, since it does not meet the nonproliferation criteria under the AEA and has unique status in the nonproliferation

regime. The potential impact of this nuclear cooperation agreement on the guidelines of the Nuclear Suppliers Group, which some Members have identified in earlier hearings as a key issue, may merit considerable review. Another practical effect is that opposing an agreement submitted under the routine approval process is more difficult than opposing an exempted agreement. Some Members may find voting for a joint resolution of disapproval more politically sensitive than opposing an exempted agreement, which could simply require not voting at all. A routine approval process would not eliminate Congress's ability to impose conditions on a nuclear cooperation agreement, but could make imposition of conditions more difficult. In the case of the 1985 nuclear cooperation agreement with China, which was submitted by the Administration as a routine agreement that met all the requirements of Section 123 a., Congress chose to pass a joint resolution of approval that contained conditions that delayed entry into force of the agreement for 13 years.⁷⁵

Second, in contrast to existing law, the proposed legislation contains no provisions for Congress to review or counter the President's determinations. It can be argued that *Chadha* weakened Congress's ability substantially to overturn such Presidential determinations, and therefore, that the proposed legislation does not affect Congressional review very much if at all. Congress would always be free to pass new legislation barring nuclear exports. However, such legislation is subject to the possibility of a presidential veto and thus would require more votes to effectively implement Congress's intent.⁷⁶

Third, the proposed legislation has the effect of eliminating Congressional review of subsequent nuclear exports. Administration officials have suggested that the annual review of licenses would be too cumbersome and the process itself has never been implemented.

It is not clear how the legislation as proposed by the Administration affects meeting other requirements of the Atomic Energy Act. Under the AEA, a proposed agreement that does not meet any one of the Section 123 (a) requirements must be presented by the President as an exempted agreement. If Congress, by passing the proposed legislation, enables the President to submit a nonconforming agreement through the regular approval process, will it be possible to ensure that those other 8 criteria in Section 123 (a) are also met, particularly with only 90 days to review the agreement? It is possible that the 30-day consultation with committees could resolve any issues related to the agreement's meeting the other 8 criteria under Section 123 a., but the proposed legislation does not include specific provisions for Congress to reject the President's determination that the agreement meets all of the requirements but Section 123 a. (2). In the case of the 1985 agreement for cooperation with China, there was some ambiguity in the text of the cooperation agreement, which led some

⁷⁵ See P.L. 99-183, 99 Stat 1174.

⁷⁶ For background on the legislative veto, see Louis Fisher, "The Legislative Veto: Invalidated, It Survives," *Law and Contemporary Problems*, Vol 56. No. 4, 1993 pp. 273-292; and Ellen Collier, "Maintaining the Legislative-Executive Balance in Foreign Policy Without the Legislative Veto," August 22, 1983, Appendix A in "Strengthening Executive-Legislative Consultation on Foreign Policy, Foreign Affairs Committee Print, October 1983.

Members to suggest that the agreement should be submitted as an exempted agreement.

In addition, Section 129 calls for a termination of exports for more than just the detonation of a nuclear explosive device. It is not clear whether, under the proposed legislation, there would be an automatic cutoff of U.S. exports if India engaged in any of the following activities:

- termination or abrogation of IAEA safeguards;
- material violation of an IAEA safeguards agreement;
- material violation of the terms of an agreement for cooperation with the United States;
- assisting, encouraging or inducing any other non-nuclear weapon states to obtain nuclear explosives or the materials and technologies needed to manufacture them; or
- re-transferring or entering into an agreement for exporting reprocessing equipment, materials or technology to another nonnuclear weapons state.

Potential Questions Raised by the Proposed Legislation. There could be several reasons the Administration has proposed legislation to create waivers for Sections 123 a. (2), 128 and 129 of the Atomic Energy Act for India. The first is that the President could not determine that meeting the full-scope safeguards requirement for India would be seriously prejudicial to achieving U.S. nonproliferation objectives or otherwise jeopardize the common defense and security. To be credible, there would have to be another U.S. nonproliferation goal or goals deemed more important to attain than full-scope safeguards for nuclear cooperation, which has been a key U.S. nonproliferation objective for almost 30 years. The Bush Administration has not named specific nonproliferation policies or objectives, beyond a desire to bring India into the "nonproliferation mainstream."

A second reason for the proposed legislation could be that annual Congressional review of export licenses would inject too much uncertainty into a nuclear relationship that had been terminated by Congressional action in the past. India's insistence on four different kinds of fuel supply assurances by the United States in its March 7, 2006 Implementation Document underscores the residual bitterness over

⁷⁷ When President Carter determined that withholding exports of U.S. fuel to India's Tarapur reactors in 1980 would be seriously prejudicial to the achievement of U.S. nonproliferation objectives, the State Department reasoned that 1) U.S. policies to discourage reprocessing and the use of plutonium in reactors could be harmed if India interpreted the cutoff as relieving itself of obligations not to reprocess U.S. fuel, retransfer material or take the Tarapur reactors out of safeguards; 2) A cutoff would make nonproliferation dialogue with India impossible; 3) A cutoff would result in India obtaining fuel from elsewhere; 4) A cutoff would reinforce the "perceptions of many countries of the unilateralism of U.S. nonproliferation policy;" 5) A cutoff would encourage India and other countries who argue for completing their own, independent full fuel cycle. See State Department Fact Sheet, June 19, 1980, Reprinted in *State Department Bulletin*, Volume 80, August 1980. P. 67.

the cutoff of U.S. nuclear fuel to the Tarapur reactors after 1980.⁷⁸ A third reason could be that the requirement under Section 129 for a halt in exports (because India has tested a nuclear device after 1978 and has an ongoing weapons program) is deemed an unnecessary hurdle, particularly since the Administration has decided to enter into a new cooperation agreement despite those two circumstances. As noted above, the proposed legislation does include a mechanism to cut off exports in the future if India tests again.

The wording of the seven requirements also raises some questions. On the "credible" separation plan, the Administration has not defined "credible" for Congress, and has not described its March 2nd agreement with India on the separation plan as "credible." India, on the other hand, has described the plan as credible, but Indian officials are likely referring to the credibility of the plan from a political and strategic perspective, rather than a nonproliferation perspective. Second, India's safeguards commitment is worded as "in accordance with IAEA practices." This does not necessarily imply safeguards in perpetuity on reactors, as the Administration has said it sought and obtained from India, in part because the IAEA has no obligation to negotiate safeguards in perpetuity with India.⁷⁹ In addition, the IAEA also has "practices" associated with voluntary safeguards arrangements negotiated with the five nuclear weapon states. With respect to India's obligation to implement an Additional Protocol, the legislation calls for "satisfactory progress," which is not defined. Does this mean India must sign or ratify an Additional Protocol, or actually begin implementation? Similarly, the obligations to work toward a multilateral fissile material cutoff treaty, supporting international efforts to prevent the spread of enrichment and reprocessing technology and taking necessary steps to secure nuclear materials and technology are worded in a vague enough manner to raise questions about the actual standards applied. Finally, the last requirement stipulates that nuclear supply by the United States would be "consistent with U.S. participation in the NSG," which provides no assurance of NSG consensus on this new approach, since compliance with NSG guidelines is strictly voluntary.

In sum, the proposed legislation raises several questions about the basis for presidential determinations on India's nonproliferation commitments. The proposed submission of the non-conforming agreement as a conforming agreement for the purposes of expedited approval raises the question of whether Congress will be able to review the agreement thoroughly. While the legislation appears to facilitate implementation of nuclear cooperation with India, it also appears to reduce congressional reviews, both in substance and process.

Potential Issues for Congress

As the Administration consults with Congress over approval of the U.S.-Indian nuclear cooperation agreement, Congress may wish to consider several questions of substance:

⁷⁸ See [http://indianembassy.org/newsite/press_release/2006/Mar/sepplan.pdf]

⁷⁹ See "Ongoing Efforts to Implement the U.S.-India Civil Nuclear Agreement," Special briefing by Under Secretary of State for Political Affairs, R. Nicholas Burns, March 16, 2006. Available at [http://www.state.gov/r/pa/prs/ps/2006/63270.htm]

- How does the nuclear cooperation agreement fit into broader U.S. strategic goals, including national security, nonproliferation, energy security, promotion of human rights, etc.?
- Is the nuclear cooperation agreement a *sine qua non* for meeting those other strategic goals?
- Is the Indian separation plan credible and defensible from a nonproliferation standpoint?
- Does the separation plan help the United States to meet its NPT obligations not to assist, encourage or induce Indian efforts to develop nuclear weapons?
- What are India's plans for its nuclear weapons program and what is the possibility that U.S. assistance could benefit that weapons program?
- How well do India's export controls function?
- If India is prepared to take on the responsibilities undertaken by other nuclear weapon states, is it prepared to stop producing fissile material for weapons? Is it prepared to declare some nuclear material as excess to its defense needs and place that material under IAEA safeguards? Is it prepared to sign the Comprehensive Test Ban Treaty?
- What would be the impact of NSG agreement to an exception for India before the U.S. Congress approves an agreement for cooperation?
- Are other countries' nuclear industries more likely to benefit from opening up nuclear cooperation with India than U.S. industries?
- What is the potential impact of U.S. nuclear cooperation with India on other U.S. nuclear nonproliferation priorities such as North Korea and Iran?
- How important are current Congressional oversight mechanisms with respect to peaceful nuclear cooperation agreements and will the proposed legislation from the Administration maintain or diminish those oversight mechanisms?
- Are additional conditions on the peaceful nuclear cooperation agreement desirable?

Ultimately, several of these issues might be addressed in a Nuclear Proliferation Assessment Statement, which the Administration is required to submit to the Congress along with the Section 123 agreement for cooperation.

If Congress chooses, it may attach conditions to approval of any agreement for cooperation. One precedent is the 1985 U.S.-China agreement for cooperation. Although the agreement contained certain restrictions on cooperation, Congress required the President to certify that (a) reciprocal arrangements would ensure that nuclear materials, facilities or components would be used solely for peaceful purposes; (b) China was not violating paragraph 2 of Section 129 (particularly with

respect to assisting non-nuclear weapon states in a nuclear weapons program); and (c) that U.S. approval for subsequent potential Chinese requests to enrich, reprocess or alter in any form material provided under the agreement would not be automatic.⁸⁰

When the U.S.-China peaceful nuclear cooperation agreement was submitted to Congress in July 1985, the Arms Control and Disarmament Agency (ACDA) had concluded that China had met all the statutory requirements. On Section 129 of the Atomic Energy Act, ACDA concluded that "Based on the available information, it is believed that a finding under Section 129 that would preclude nuclear exports to China under the proposed Agreement is not warranted." Nonetheless, a presidential certification on the three matters was not made until January 12, 1998.

In the case of a U.S.-India nuclear cooperation agreement, similar certifications are possible, particularly on the peaceful uses of U.S. technology and material. Other potential prerequisites for implementing an agreement could include completion of India's safeguards arrangements (including possibly subsidiary arrangements) with the International Atomic Energy Agency, executive branch certification of adequate transparency in the separation of India's civilian and military nuclear facilities, prior agreement by the Nuclear Suppliers Group for creating an exception for India, or substantive progress toward negotiating a fissile material production cutoff treaty, or even an Indian declaration that it has stopped producing fissile material for weapons.

⁸⁰ P.L. 99-183.

 $^{^{81}}$ Nuclear Proliferation Assessment Statement, page II-13 (reprinted in House Document 99-86, p. 41.)

Appendix: Frequently Asked Questions About U.S.-India Nuclear Cooperation

Is there a signed peaceful nuclear cooperation agreement?

No. The United States and India must negotiate the text of a peaceful nuclear cooperation agreement (pursuant to the Atomic Energy Act). That agreement is required to specify the terms, conditions, duration, nature and scope of cooperation. Negotiating that agreement could last anywhere from months to a year or more.

What was the agreement signed on March 2, 2006?

In July 2005, India committed to identifying and separating its civilian and military nuclear facilities and programs. On March 2, 2006, U.S. and Indian officials agreed upon a final "separation" plan.

Is membership in the Nuclear Nonproliferation Treaty (NPT) necessary to sign a peaceful nuclear cooperation agreement?

No, but the Nuclear Nonproliferation Act of 1978 made comprehensive International Atomic Energy Agency (IAEA) safeguards a requirement for nuclear cooperation with non-nuclear weapon states.

What are comprehensive IAEA safeguards?

States that join the NPT as non-nuclear weapon states are obligated to sign an agreement with the IAEA to safeguard all the nuclear material in their state and under their jurisdiction. These are called "comprehensive" or "full-scope" nuclear safeguards, or INFCIRC/153-type safeguards.

Does India have IAEA safeguards now on some nuclear facilities?

India has facility-specific (INFCIRC/66-type) safeguards on two U.S.-supplied reactors at Tarapur, two Canadian-supplied reactors at Rajasthan, and has concluded a safeguards agreement for two Russian-supplied reactors under construction at Kudankulam. India also applies intermittent safeguards at its reprocessing plant at Tarapur when safeguarded fuel is present.

If India has nuclear weapons, why isn't it considered a nuclear weapons state?

The Nuclear Nonproliferation Treaty (NPT) defined nuclear weapons states as those states that had detonated a nuclear explosive device before January 1, 1967. Those states are the United States, the United Kingdom, Russia, France, and China. U.S. law follows the NPT definition.

Which laws is the Administration seeking to adjust?

The Atomic Energy Act (P.L. 83-703) does not prohibit nuclear cooperation with India, but has three provisions that contain restrictions. The first is Section 123,

which requires non-nuclear weapon state recipients of U.S. nuclear cooperation to have full-scope safeguards, among other requirements. The second is Section 128, which requires full-scope safeguards to license nuclear exports. The third is Section 129, which would terminate nuclear exports if a non-nuclear weapon state has conducted a nuclear test after 1978 or continues a nuclear weapons program without steps to terminate such activities

Does U.S. law have to be changed to sign a peaceful nuclear cooperation agreement with India?

No. The Atomic Energy Act (P.L. 83-703) allows for waivers and determinations. The President can exempt an agreement from any of the requirements in Section 123a if he determines that their inclusion would be "seriously prejudicial to the achievement of U.S. non-proliferation objectives or otherwise jeopardize the common defense and security." Not meeting any one of the 9 requirements would require the President to submit the agreement as "exempted." If the Congress approves, by joint resolution, such an exempted agreement, exports can be sent to India provided that the Congress reviews one export license every 12 months after the resolution of approval has been adopted (Section 128 b. (3)). Section 129 requires an automatic cutoff of exports if a non-nuclear weapon state has tested a nuclear weapon after 1978, among other things. Since India tested nuclear weapons in 1998, there would be an automatic cutoff of nuclear exports. However, the President can waive termination if he determines that "cessation of such exports would be seriously prejudicial to the achievement of U.S. non-proliferation objectives or otherwise jeopardize the common defense and security."

What facilities did India designate as civilian on March 2, 2006?

The identification process is not yet complete. In a statement to the Indian Parliament on March 7, 2006, India identified 14 out of 22 power reactors to declare as civilian; some facilities at the fuel fabrication complex to be identified in the future; some spent fuel storage; 3 heavy water plants (which are not required to be safeguarded); and several research facilities (which are not required to be safeguarded). India has stated that the 14 plants equal 65% of its total nuclear electricity capacity (known as megawattage). However, 6 of those plants are already covered by existing IAEA safeguards agreements.